

Amendments to the Claims

This listing of claims will replace all prior listings of claims in the application.

Listing of Claims

1. (Canceled)

2. (Currently Amended) The method for clarification of sludge of ~~claim 1~~claim 6, wherein the specific ray is a ray which has a wavelength of the range from the ultraviolet ray region to the near-ultraviolet ray region.

3. (Currently Amended) The method for clarification of sludge of ~~claim 1~~claim 6, wherein ~~waste fluid raw solution~~the discharge waste sludge is wash water from a pigshed, a cowshed or a chicken house, or waste wash water from a butchery, or a processed foods liquid of an over relishing period, ~~such as coffee, Sake or Shochu.~~

4. (Currently Amended) The method for clarification of sludge according to ~~claim 1~~claim 6, wherein ~~solids~~solids obtained by ~~a~~the solid-liquid separator and ~~a~~the first filtration apparatus ~~is~~are used as a soil conditioner.

5. (Canceled)

6. (New) A method for clarifying a sludge, comprising the steps of:

recovering a discharged waste sludge;

separating the discharged waste sludge into a solids fraction and a liquid fraction in a solid-liquid separation unit;

recovering the liquid fraction from the solid-liquid separation unit;

passing the recovered liquid fraction through a first filtration apparatus to obtain a first filtrate and a first solids residue;

recovering the first filtrate from the first filtration apparatus;

simultaneously ozonizing the first filtrate and irradiating the first filtrate directly with a specific ray to obtain a first treated liquid;

recovering the first treated liquid;

passing the first treated liquid through a second filtration apparatus to obtain a second filtrate and a second solids residue;

recovering the second filtrate from the second filtration apparatus;

simultaneously ozonizing the second filtrate and irradiating the second filtrate directly with the specific ray to obtain a second treated liquid;

recovering the second treated liquid; and

passing the second treated liquid through a third filtration apparatus to obtain a product liquid.

7. (New) A system for clarifying a sludge, comprising a solid-liquid separation unit for separating a discharged waste sludge into a solids fraction and a liquid fraction;

a first filtration apparatus for separating the liquid fraction into a first filtrate and a first solids residue;

a first treatment apparatus for simultaneously ozonizing the first filtrate and irradiating the first filtrate directly with a specific ray to obtain a first treated liquid;

a second filtration apparatus for separating the first treated liquid into a second filtrate and a second solids residue;

a second treatment apparatus for simultaneously ozonizing the second filtrate and irradiating the second filtrate

directly with the specific ray to obtain a second treated liquid; and

a third filtration apparatus for separating the second treated liquid into a product liquid and a third solids residue, wherein said first and second treatment apparatuses each comprises specific ray lamps provided parallel to each other and a guide plate for flowing the first and second filtrates in a spiral manner between the specific ray lamps.